

# Ultra-Lite and Lite Qseven Carrier Boards

## User Manual



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## Table of Contents

Customer Support Overview .....	4
Contact Information.....	4
Limited Lifetime Warranty.....	5
Copyright Notice .....	5
Trademark Acknowledgment .....	5
Revision History .....	5
Introduction .....	6
What is Qseven? .....	6
ESD Warning.....	6
Product Features.....	7
System Block Diagram .....	7
Hardware Description.....	8
Ultra Lite Qseven Carrier Board Connector Locations .....	8
Ultra Lite – Top.....	8
Ultra Lite – Bottom .....	8
Ultra Lite Jumper and Connector Summary .....	9
Lite Qseven Carrier Board Connector Locations .....	10
Lite – Top.....	10
Lite – Bottom .....	11
Lite Connector and Jumper Summary .....	11
Qseven Module Interface .....	12
Description.....	12
Connector.....	12
Video.....	12
HDMI.....	12
LVDS .....	13
Description.....	13
LVDS Video Header .....	13
LVDS Backlight.....	14
LVDS Backlight connector.....	14
LVDS Backlight Power Jumper .....	14
Power for LVDS Panel Circuits .....	14
LVDS backlight enable polarity.....	15
USB 2.0.....	16
Description.....	16
Connector.....	16
SATA .....	17
Description.....	17
Connector & LEDs .....	17

miniPCle .....	18
miniPCle SIM Card .....	18
miniPCle WiFi Status LEDs .....	19
miniPCle WiFi Jumpers.....	19
Power .....	20
Description.....	20
Power Connectors .....	20
+5VSB Jumper.....	20
Power Good Jumper.....	21
Module Current Requirements .....	21
Current Consumption information .....	21
J3 Miscellaneous Functions .....	21
Hardware Installation .....	22
Software Installation & Configuration .....	23
Operating System Notes.....	23
Linux.....	23
US15W Specific .....	23
Windows .....	23
US15W Specific .....	23
Cables & Interconnect .....	24
Dimensions Ultra Lite Qseven Carrier Board.....	25
Dimensions Lite Qseven Carrier Board.....	26
Specifications .....	27
Part Numbers .....	27

## Customer Support Overview

If you experience difficulties after reading the manual and/or using the product, contact the Connect Tech reseller from which you purchased the product. In most cases the reseller can help you with product installation and difficulties.

In the event that the reseller is unable to resolve your problem, our highly qualified support staff can assist you. Our support section is available 24 hours a day, 7 days a week on our website at: [www.connecttech.com/sub/support/support.asp](http://www.connecttech.com/sub/support/support.asp). See the contact information section below for more information on how to contact us directly. Our technical support is always free.

## Contact Information

We offer three ways for you to contact us:

### Mail/Courier

You may contact us by letter at:

Connect Tech Inc.  
Technical Support  
42 Arrow Road  
Guelph, Ontario  
Canada N1K 1S6

### Email/Internet

You may contact us through the Internet. Our email and URL addresses on the Internet are:

[sales@connecttech.com](mailto:sales@connecttech.com)  
[support@connecttech.com](mailto:support@connecttech.com)  
[www.connecttech.com](http://www.connecttech.com)

### Note:

Please go to the [Download Zone](#) or the [Knowledge Database](#) in the [Support Center](#) on the Connect Tech website for product manuals, installation guides, device driver software and technical tips. Submit your technical support questions to our customer support engineers via the [Support Center](#) on the Connect Tech website.

### Telephone/Facsimile

Technical Support representatives are ready to answer your call Monday through Friday, from 8:30 a.m. to 5:00 p.m. Eastern Standard Time. Our numbers for calls are:

**Toll Free:** 800-426-8979 (North America only)

**Telephone:** 519-836-1291 (Live assistance available 8:30 a.m. to 5:00 p.m. EST, Monday to Friday)

**Facsimile:** 519-836-4878 (on-line 24 hours)

## Limited Lifetime Warranty

Connect Tech Inc. provides a Lifetime Warranty for all Connect Tech Inc. products. Should this product, in Connect Tech Inc.'s opinion, fail to be in good working order during the warranty period, Connect Tech Inc. will, at its option, repair or replace this product at no charge, provided that the product has not been subjected to abuse, misuse, accident, disaster or non-Connect Tech Inc. authorized modification or repair.

You may obtain warranty service by delivering this product to an authorized Connect Tech Inc. business partner or to Connect Tech Inc. along with proof of purchase. Product returned to Connect Tech Inc. must be pre-authorized by Connect Tech Inc. with an RMA (Return Material Authorization) number marked on the outside of the package and sent prepaid, insured and packaged for safe shipment. Connect Tech Inc. will return this product by prepaid ground shipment service.

The Connect Tech Inc. Lifetime Warranty is defined as the serviceable life of the product. This is defined as the period during which all components are available. Should the product prove to be irreparable, Connect Tech Inc. reserves the right to substitute an equivalent product if available or to retract Lifetime Warranty if no replacement is available.

The above warranty is the only warranty authorized by Connect Tech Inc. Under no circumstances will Connect Tech Inc. be liable in any way for any damages, including any lost profits, lost savings or other incidental or consequential damages arising out of the use of, or inability to use, such product.

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## Revision History

Revision 0.00 – June 2, 2011

## Introduction

Connect Tech's Ultra Lite and Lite Qseven Carrier Boards are small low cost, feature rich carriers that integrate with any industry standard Qseven module. These bus-independent carrier boards offer easy connection to SATA, USB, Ethernet, LVDS and VGA video, and RS-232 and RS-422/485, with Mini-PCIe and SIM-card expansion capability. Mini-PCIe peripherals such as WiFi, GPS, Bluetooth, or storage are optional. Ultra Lite and Lite Qseven Carrier Boards offer several processor options including Intel® Atom™, Freescale i.MX51, TI OMAP, and NVIDIA Tegra, which are easily upgradable to accommodate future generations.

Connect Tech's Qseven carrier boards are ideal for compact computing applications in mobile entertainment, kiosks, digital signage, soldier wearable systems and gaming.

## What is Qseven?

Qseven is an off-the-shelf, multi-vendor, computer-on-module that integrates the core components of a common PC. The Qseven standard allows upgrading to the latest processor and memory technology with ease, while maintaining the I/O interfaces.

To learn more about Connect Tech's Qseven carrier, visit <http://www.connecttech.com/Qseven>.

## ESD Warning



Electronic components and circuits are sensitive to ElectroStatic Discharge (ESD). When handling any circuit board assemblies including Connect Tech Qseven carrier assemblies, it is recommended that ESD safety precautions be observed. ESD safe best practices include, but are not limited to:

- Leaving circuit boards in their antistatic packaging until they are ready to be installed.
- Using a grounded wrist strap when handling circuit boards, at a minimum you should touch a grounded metal object to dissipate any static charge that may be present on you.
- Only handling circuit boards in ESD safe areas, which may include ESD floor and table mats, wrist strap stations and ESD safe lab coats.
- Avoiding handling circuit boards in carpeted areas.
- Try to handle the board by the edges, avoiding contact with components.

## Product Features

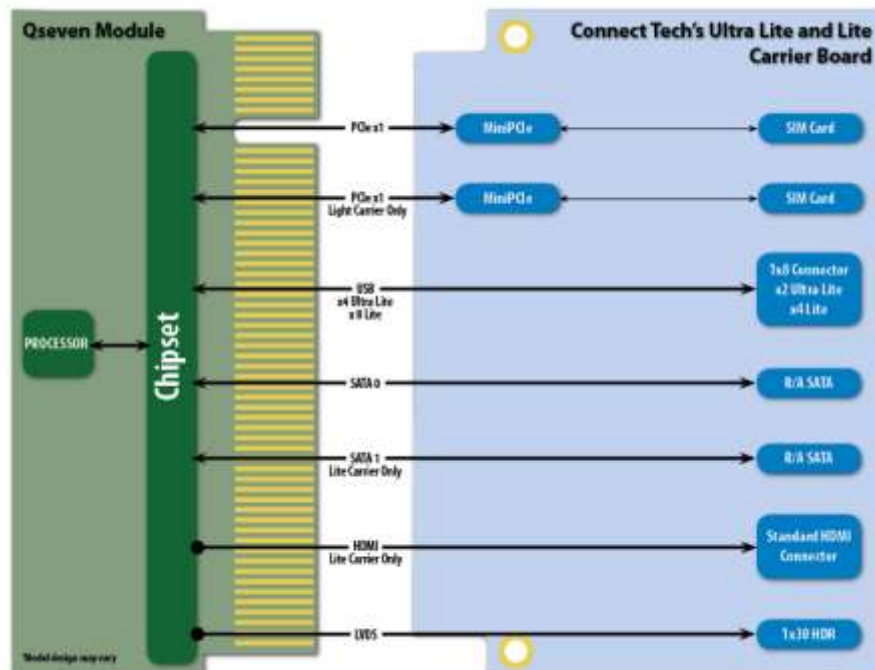
Feature	Ultra Lite Qseven Carrier	Lite Qseven Carrier
Size	PicoITX, 72x100mm	128x100mm
Mini-PCIe Connector	1	2
SIM Card Connector	1	2
LVDS Video & Backlight controls	Yes	Yes
HDMI Video/Audio	-	Yes
Power Connectors <ul style="list-style-type: none"> <li>• Molex HDD</li> <li>• Optional Screw Term</li> </ul>	Yes Optional	Yes Optional
USB Ports	4	8
SATA Ports	1	2
RTC 3.3V Battery	Yes	Yes
Accessories	Optional cable kit	Optional cable kit

## System Block Diagram

Atom based Qseven modules implement the core processing features including: processor, memory, and system physical interfaces via the southbridge.

Many of the Qseven modules are based on the mobile Intel® Atom™ architecture (Z series processor + SCH US15W chipset), shown in the block diagram below.

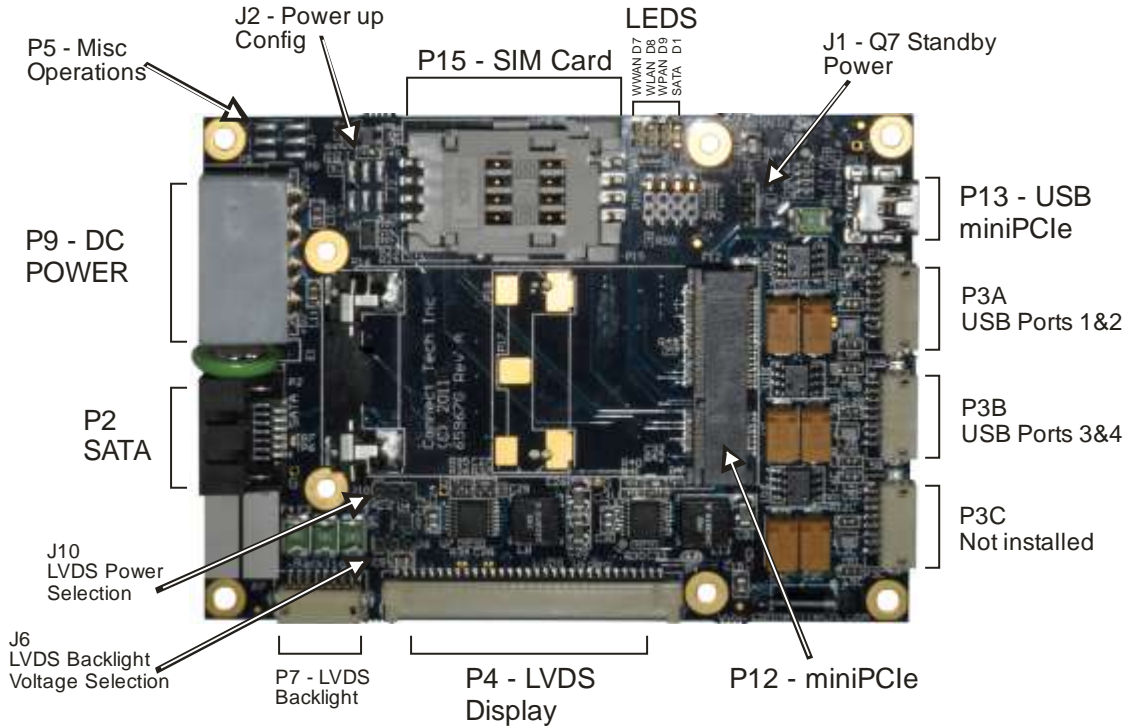
This document will generally refer to the features of the US15W.



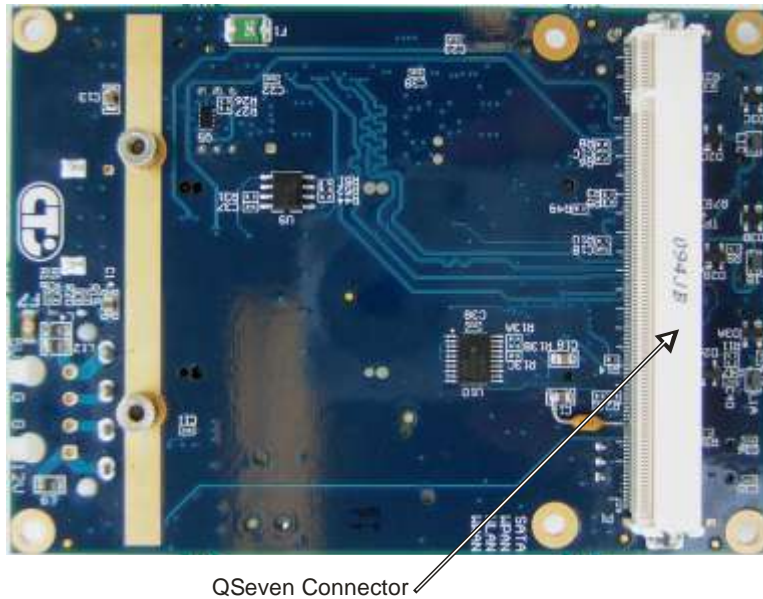
## Hardware Description

### Ultra Lite Qseven Carrier Board Connector Locations

#### *Ultra Lite – Top*



#### *Ultra Lite – Bottom*





**Ultra Lite Jumper and Connector Summary****Connector Summary**

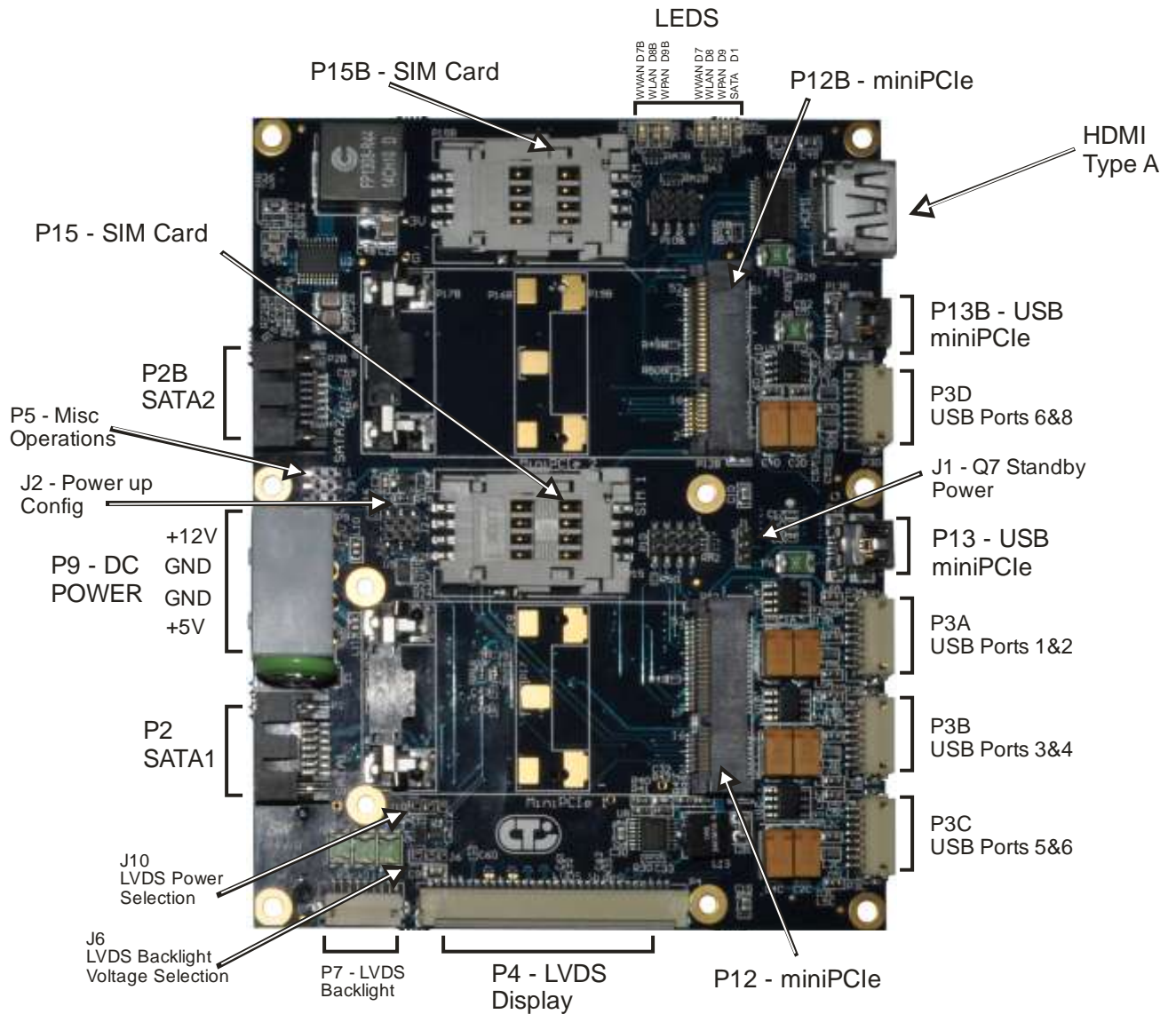
Location	Connection
P1	Q7
P2	SATA 1
P3	USB Ports 1 and 2
P3	USB Ports 3 and 4
P7	LVDS Backlight Power
P8	LVDS Display
P9	DC Power
P10	LED header for miniPCle 1
P12	miniPCle 1
P13	USB for miniPCle 1
P15	SIMCard 1

**Jumper Summary**

Jumper	Function
J1	Qseven +5V Standby power
J2	Power up configuration
J3	Miscellaneous operations
J6	LVDS Backlight voltage selection
J10	LVDS Power selection

## Lite Qseven Carrier Board Connector Locations

### Lite – Top



**Lite – Bottom****Lite Connector and Jumper Summary****Connector Summary**

Location	Connection
P1	Q7
P2A	SATA 1
P2B	SATA 2
P3A	USB Ports 1 and 2
P3B	USB Ports 3 and 4
P3C	USB Ports 5 and 6
P3D	USB Ports 7 and 8
P7	LVDS Backlight Power
P8	LVDS Display
P9	DC Power
P10	LED header for miniPCle 1
P11	LED header for miniPCle 2
P12A	miniPCle 1
P12B	miniPCle 2
P13	USB for miniPCle 1
P14	USB for miniPCle 2
P15A	SIMCard 1
P15B	SIMCard 2

**Jumper Summary**

Jumper	Function
J1	Qseven +5V Standby power
J2	Power up configuration
J3	Miscellaneous operations
J6	LVDS Backlight voltage selection
J10	LVDS Power selection

## Qseven Module Interface

### Description

The processor and chipset are implemented on the Qseven CPU module, which connects to the Qseven carrier via a MXM connector. Many of the existing Qseven modules use the Intel® Atom™ mobile architecture, Z series processor SCH US15W chipset. The Qseven carrier implements a subset of the Qseven features, as described in the introduction.

For a list of Qseven module vendors, visit <http://www.qseven-standard.org/>

### Connector

<b>Function</b>	Qseven interface
<b>Location</b>	P1
<b>Type</b>	MXM Foxconn AS0B326-S78N-7F (or equivalent)
<b>Pinout</b>	Refer to Qseven specification

### Video


The availability of the graphics interfaces depends on the Qseven module selected.

*US15W:* The US15W chipset provides GMA 500 graphics sub-system and provides two display interfaces: SDVO (serial digital video output) and LVDS (low voltage differential signalling). The resolution generated by the GMA 500 is limited 1280x1024.

The configuration of either interface as the primary or secondary display depends on the Qseven module's BIOS capabilities and settings. Refer to the Qseven module's documentation for more details.

### HDMI

An HDMI connector is provided on the Qseven Lite carrier.

<b>Function</b>	HDMI	
<b>Location</b>	P8	
<b>Type</b>	Standard HDMI Type A	

## LVDS

LVDS Video is provided on both the *Ultra Lite* and *Lite* Qseven Carrier Boards.

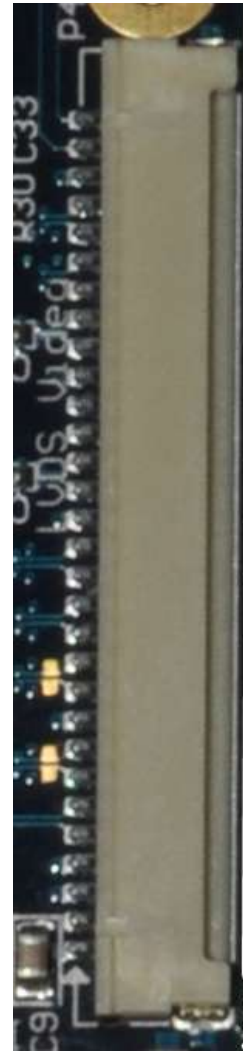
### Description

The Qseven carrier provides dual 18 or 24 bit LVDS display channels via P4, which are connected directly from the Qseven module. LVDS panel supply power is selected with jumper J104 and backlight power is selected with jumper J6. Both are current limited to 500 mA.

*US15W*: The US15W provides only a single 18 or 24 bit display channel. Each LVDS data pair carries two bits, each channel has four data pairs.

### LVDS Video Header


Function	LVDS Graphics		
Location	P4		
Type	Hirose DF14-30P-1.25H connector		
Pinout	Pin	Signal	Description
	1	VCC_PNL	Panel Power
	2	VCC_PNL	Panel Power
	3	GND	Digital ground
	4	GND	Digital ground
	5	LVDS_A3_N	Channel A Data
	6	LVDS_A3_P	Channel A Data
	7	LVDS_CLK_N	Channel A Clock
	8	LVDS_ACLK_P	Channel A Clock
	9	GND	Digital ground
	10	LVDS_A2_N	Channel A Data
	11	LVDS_A2_P	Channel A Data
	12	LVDS_A1_N	Channel A Data
	13	LVDS_A1_P	Channel A Data
	14	LVDS_A0_N	Channel A Data
	15	LVDS_A0_P	Channel A Data
	16	GND	Digital ground
	17	LVDS_B3_N	Channel B Data
	18	LVDS_B3_P	Channel B Data
	19	LVDS_BCLK_N	Channel B Clock
	20	LVDS_BCLK_P	Channel B Clock
	21	GND	Digital ground
	22	LVDS_B2_N	Channel B Data
	23	LVDS_B2_P	Channel B Data
	24	LVDS_B1_N	Channel B Data
	25	LVDS_B1_P	Channel B Data
	26	LVDS_B0_N	Channel B Data
	27	LVDS_B0_P	Channel B Data
	28	GND	Digital ground
	29	LVDS_DID_CLK	Display ID Clock (3.3V)
	30	LVDS_DID_DATA	Display ID Data (3.3V)



## LVDS Backlight


### LVDS Backlight connector

<b>Function</b>	LVDS backlight power		
<b>Location</b>	P7		
<b>Type</b>	Hirose DF13-8P-1.25H connector		
<b>Pinout</b>	<b>Pin</b>	<b>Signal</b>	<b>Description</b>
	1	+12V	+12 V DC, max. 1A
	2	+12V	+12 V DC, max. 1A
	3	+5V	+5 V DC, max. 1A
	4	+5V	+5 V DC, max. 1A
	5	LVDS_BLEN	Backlight enable, level selected with J4
	6	VCC_BKL	Back light power, selected with J6
	7	GND	Digital ground
	8	GND	Digital ground




### LVDS Backlight Power Jumper

<b>Function</b>	<b>LVDS backlight power select</b> Selects either +12V or +5V. Refer to the display panel's documentation for proper configuration.	
<b>Location</b>	J6	
<b>Type</b>	1x3 0.100" jumper block	
<b>Pinout</b>	<b>Position</b>	<b>Description</b>
	1-2	+5V
	2-3	+12V
	off	floating
<b>Default</b>	+12V	

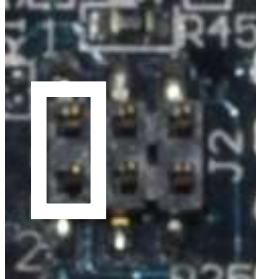


### Power for LVDS Panel Circuits

<b>Function</b>	<b>LVDS panel power select</b> Selects either +3.3V or +5V. Refer to the display documentation for proper configuration.	
<b>Location</b>	J10	
<b>Type</b>	1x3 0.100" jumper block	
<b>Pinout</b>	<b>Position</b>	<b>Description</b>
	1-2	+5V
	2-3	+3.3V
	off	floating
<b>Default</b>	+3.3V	



**LVDS backlight enable polarity**

Function	LVDS backlight enable polarity Selects either positive or negative. Refer to the inverter power supply documentation for proper configuration.								
Location	J5								
Type	1x2 2mm jumper block								
Pinout	<table><tr><th>Position 1-2</th><th>Description</th></tr><tr><td>Off</td><td>Positive polarity</td></tr><tr><td>On</td><td>Negative polarity</td></tr></table>			Position 1-2	Description	Off	Positive polarity	On	Negative polarity
Position 1-2	Description								
Off	Positive polarity								
On	Negative polarity								
Default	Positive polarity								



## USB 2.0

### Description

The Qseven carrier implements either 4 or 8 of the available USB 2.0 connections via two connectors. Over current protection and power supply filtering is provided.

Only the USB host features of the Qseven specification have been implemented, USB client features are not supported.

### Connector

Function	USB 2.0 x2			Ultra Lite	Lite
					
Locations	Ultra Lite: P3A, P3B				
	Lite: P3A, P3B, P3C, P3D				
Type	Hirose DF13-8P				
Pinout	Pin	Signal	Description		
	1	VCC_USB_0	Port 0 Filtered +5V		
	2	USB_0_N	Port 0 Data		
	3	USB_0_P	Port 0 Data		
	4	USB_GND_0	Port 0 Filtered Digital Ground		
	5	USB_GND_1	Port 1 Filtered Digital Ground		
	6	USB_1_N	Port 1 Data		
	7	USB_1_P	Port 1 Data		
	8	VCC_USB_1	Port 1 Filtered +5V		



## SATA



### Description



The Qseven carrier provides 1 or 2 SATA host connections.

**US15W:** Some Qseven modules based on the US15W, convert the US15W's IDE interface to one SATA connection (as IDE master) and one built-in NAND based flash drive (as IDE slave). Consult the Qseven module's documentation for more information.

In this case only P10A connector is active.


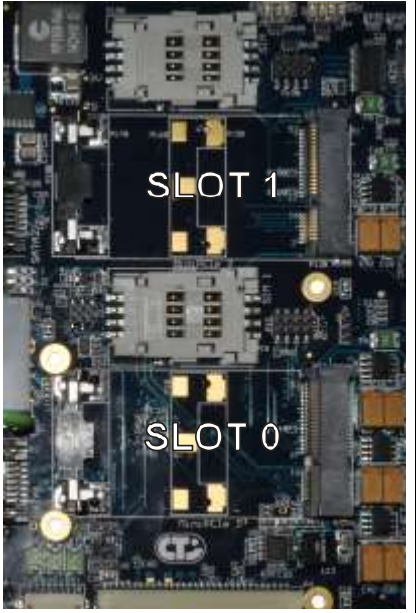
### Connector & LEDs

Function	SATA host		Ultra Lite	Lite														
Locations	Ultra Lite: P2																	
	Lite: P2, P2B																	
Type	Industry standard right angle SATA host connector Molex 0470804005 (or equivalent)																	
Pinout	<table><tr><th>Pin</th><th>Signal</th></tr><tr><td>1</td><td>GND</td></tr><tr><td>2</td><td>SATA_TX_P</td></tr><tr><td>3</td><td>SATA_TX_N</td></tr><tr><td>4</td><td>GND</td></tr><tr><td>5</td><td>SATA_RX_N</td></tr><tr><td>6</td><td>SATA_RX_P</td></tr><tr><td>7</td><td>GND</td></tr></table>				Pin	Signal	1	GND	2	SATA_TX_P	3	SATA_TX_N	4	GND	5	SATA_RX_N	6	SATA_RX_P
	Pin	Signal																
	1	GND																
	2	SATA_TX_P																
	3	SATA_TX_N																
	4	GND																
	5	SATA_RX_N																
	6	SATA_RX_P																
	7	GND																

Function	SATA Status LEDs	Ultra Lite	Lite
Location	Ultra Lite: D1		
	Lite: D1		

## miniPCle

The Qseven carrier has either 1 or 2 miniPCle connectors.

Function	miniPCle	Ultra Lite	Lite
Locations	Ultra Lite: P12		
	Lite: P12, P12A		
Type	Molex miniPCle		

## miniPCle SIM Card

The Qseven carrier has either 1 or 2 miniPCle SIM Card connectors.

Function	SIM Card																				
Locations	Ultra Lite: P15																				
	Lite: P15, P15B																				
Type	FCI Hinged, PN: 7112S0825X01LF																				
Pinout	<table><tr><th>Pin</th><th>Signal</th></tr><tr><td>1</td><td>3.3V</td></tr><tr><td>2</td><td>Reset</td></tr><tr><td>3</td><td>CLK</td></tr><tr><td>4</td><td>C4</td></tr><tr><td>5</td><td>GND</td></tr><tr><td>6</td><td>VPP</td></tr><tr><td>7</td><td>DATA</td></tr><tr><td>8</td><td>C8</td></tr></table>			Pin	Signal	1	3.3V	2	Reset	3	CLK	4	C4	5	GND	6	VPP	7	DATA	8	C8
	Pin	Signal																			
	1	3.3V																			
	2	Reset																			
	3	CLK																			
	4	C4																			
	5	GND																			
	6	VPP																			
	7	DATA																			
8	C8																				

**miniPCle WiFi Status LEDs**

The Qseven carrier has either 1 or 2 sets of status LEDs.

Function	Status LEDs	
Locations	Ultra Lite: D7, D8, D9	
	Lite: D7, D8, D9, D7A, D8A, D9A	
	LED	Function
	D7, D7A	WWAN
	D8, D8A	WLAN
	D9, D9A	WPAN

**miniPCle WiFi Jumpers**

Function	W_DISABLE	
Locations	Ultra Lite: P10D	
	Lite: P10D, P10BD	
	Jumper	Function
	IN	Radio Disabled
	OUT	Radio Enabled

## Power


### Description

The Ultra Lite and Lite Qseven carriers are designed to be powered from a +5V and +12V power supply. The carrier boards feature a standard Molex HDD power style connector, or optional screw terminal style connectors (contact [sales@connecttech.com](mailto:sales@connecttech.com) for more about screw terminal connectors).

A Panasonic BR1225A/FA Lithium battery provides the VBAT for the Qseven module.


The Qseven carrier generates 3.3V and 1.5V on board for the miniPCIe connectors and other circuits.

### Power Connectors

Function	Molex HDD input power			<div>Ultra Lite &amp; Lite</div> <div></div> <div>Mating connector Molex: 0015244048</div>														
Location	P9																	
Type	Molex: 15244441, R/A PCB Connector																	
Pinout	<table><thead><tr><th>Pin</th><th>Signal</th><th>Description</th></tr></thead><tbody><tr><td>1</td><td>+5V</td><td>Main Power</td></tr><tr><td>2</td><td>GND</td><td>Main Return</td></tr><tr><td>3</td><td>GND</td><td>Main Return</td></tr><tr><td>4</td><td>+12V</td><td>Used for LVDS backlights that require 12VDC</td></tr></tbody></table>				Pin	Signal	Description	1	+5V	Main Power	2	GND	Main Return	3	GND	Main Return	4	+12V
Pin	Signal	Description																
1	+5V	Main Power																
2	GND	Main Return																
3	GND	Main Return																
4	+12V	Used for LVDS backlights that require 12VDC																

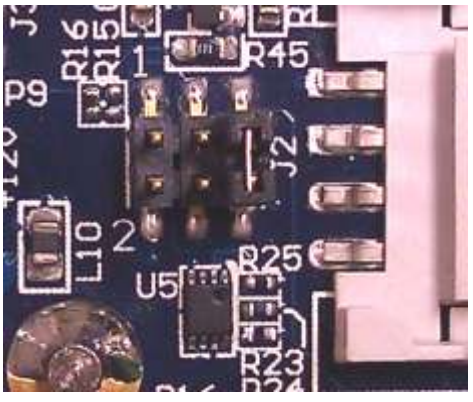
### +5VSB Jumper

Function	+5V SB		
Location	J1		
Type	1x3 2 mm		
Pinout			
	Position	Description	
	1-2	+5V SB powered with 5V	
	2-3	+5V SB floating. Pins 2-3 have no function	
	Off	Floating	



**Power Good Jumper**

<b>Function</b>	Power Up Control		
<b>Location</b>	J2		
<b>Type</b>	2x3 2 mm		
<b>Pinout</b>	<b>Position</b>	<b>Description</b>	
	1-2	See LVDS backlight	
	2-3	PWGRIN 10k pullup to 3.3V	
	4-6	PWGRIN to Q7 module*	



\* The Power Good signal is delayed 200mS after the +5V, +3.3V and +1.5V rails are at their stable nominal values. Jumper 4-6 installed is recommended.

**Module Current Requirements**

Voltage	Current - Ultra Lite	Current - Lite
+5V	Up to 5A	Up to 6.8A
+5V Fuse	5A	7A
+12V	200mA	200mA

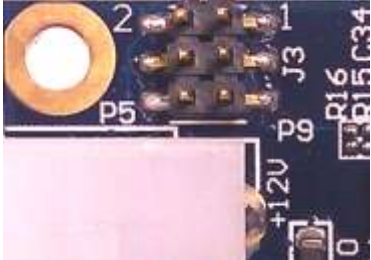
**Current Consumption information**

The majority of the current consumption is from the Qseven and the miniPCle modules.

Module	Current
Qseven Module V1.2	900mA to 1500mA max from 5V rail
miniPCle	2750mA max @3.3V / 2020mA from 5V rail

**J3 Miscellaneous Functions**

<b>Function</b>	Miscellaneous Functions		
<b>Location</b>	J3		
<b>Type</b>	2x3 2 mm		
<b>Pinout</b>	<b>Position</b>	<b>Description</b>	
	1-2	Momentary in will generate a reset pulse via PWGRIN signal on Q7 Module. PWGRIN will be pulsed.	
	2-3	Connection for external battery	
	4-6	No function	



## Hardware Installation

1. Ensure all external system power supplies are off.
2. Install the Qseven module into P1. Be sure to follow the manufacturer's direction for proper heatsink/heatspreader installation and any other cooling instructions from the manufacturer.
3. Connect Tech Qseven carriers are equipment with two ECM00870-L standoffs, height 5mm, thread M2.5 for the purpose of securing the Qseven module and head spreader to the Qseven carrier.
4. Verify all jumper settings from the relevant sections, paying special attention the power selection jumpers. Some typical settings are outlined below.

Jumper	Function	Selection	Position
J1	Qseven Standby Power	+5VSB	1-2
J2	Power Up Control	Power Good Delay	4-6
J2	LVDS backlight enable polarity	positive	1-2 Off
J6	LVDS Backlight Power	+12V	2-3
J10	LVDS panel power	+3.3V	2-3

5. Install the necessary cables for the application. At a minimum, this would include:
  - a) Power cable
  - b) Video display cable LVDS and/or HDMI.
  - c) Keyboard and mouse via USB

For the relevant cables, see the Cables & Interconnect section of this manual

6. Connect the appropriate I/O peripherals to the interface cables: keyboard, mouse, LVDS Display, SATA Disk, USB boot disk, etc.
7. Connect the power cable to power supply
8. Switch on the power supply. DO NOT power up your Qseven system by plugging in live power.

## Software Installation & Configuration

In general, always refer to the Qseven module's manual for proper installation of software drivers and configuration software; as well as for appropriate BIOS settings.

The following sections provides some specific notes and hints for successful module integration

### Operating System Notes

#### *Linux*

##### **US15W Specific**

Graphics: Intel Driver support for the Poulsbo / GMA500 is limited to several distributions (Redhat, Fedora). See IEGD (Intel Embedded Graphics Driver) website for details  
<http://edc.intel.com/Software/Downloads/IEGD/#compatibility>

Other distributions, such as Linux, are supported through the open source community.

#### *Windows*

##### **US15W Specific**

Graphics: In some cases, the secondary LVDS display will appear washed out, to avoid this ensure the correct version of the IEGD is installed.

## Cables & Interconnect

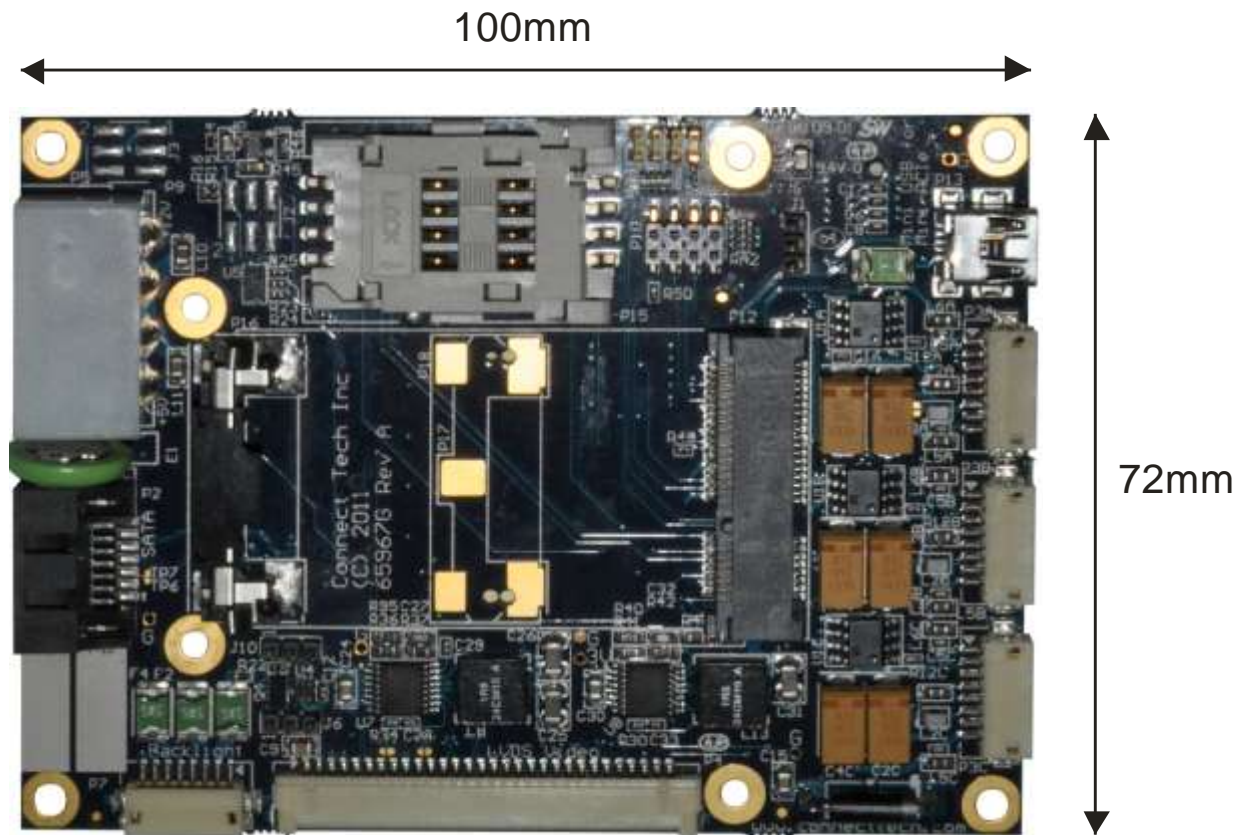
The following table summarizes the Qseven carrier's headers and lists the matching cables included with the optional cable kit CKG001.

PCB Connector	Cable Part Number	Drawing Number	Description	PCB End	Interface End
Hirose DF13-8P- 1.25H(50)	CBG071	CTIC-00182	USB (dual)	Hirose DF13A-8S-1.25C	USB 2.0 Type A female
Hirose DF14-30P- 1.25H(25)	CBG076	CTIC-00196	LVDS un-terminated	Hirose DF14-30S-1.25C	N/A
Hirose DF13-8P- 1.25H(50)	CBG078	CTIC-00198	Backlight un-terminated	Hirose DF13A-8S-1.25C	N/A
Molex 470804005	CBG079	CTIC-00199	SATA	SATA	SATA
Samtec TMM-102-02-L-S	CBG080	CTIC-00200	Reset Button	1x2 2mm socket	Momentary Pushbutton
HDMI Type A 1747981-1	CBG086	CTIC-00210	1.5M HDMI cable	HDMI Type A	HDMI Type A

Cable drawings are available upon request. Send an email to: [support@connecttech.com](mailto:support@connecttech.com).

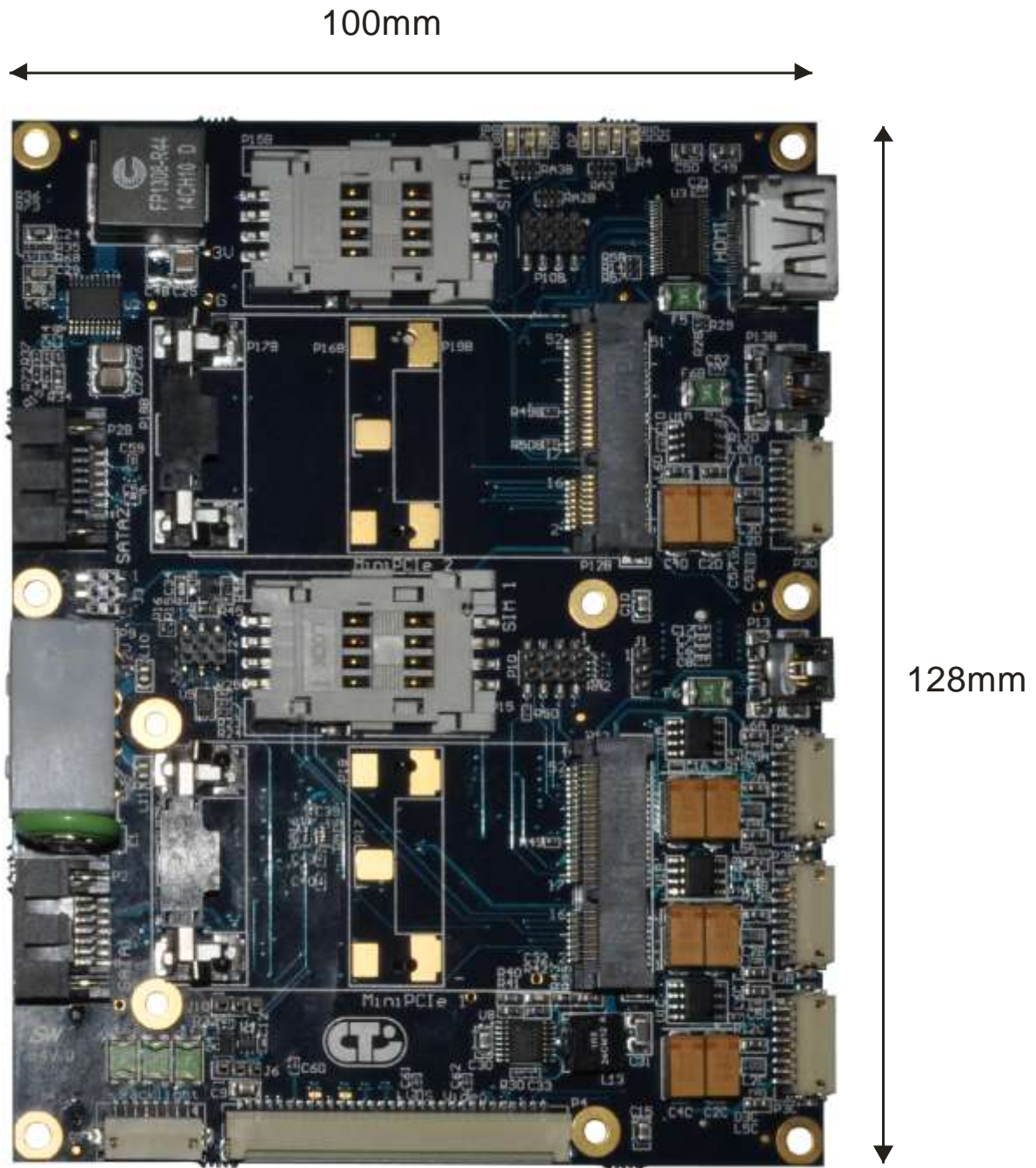


## Dimensions Ultra Lite Qseven Carrier Board



PicoITX Form factor

## Dimensions Lite Qseven Carrier Board



## Specifications

<b>Form Factor</b>	Pico ITX 72x100mm, and 100mmx128mm		
<b>Display</b>	LVDS flat panel and HDMI (Lite carrier only)		
<b>Expansion</b>	1 or 2 miniPCIe slots with SIM card and USB		
<b>Storage</b>	1 or 2 SATA (7 pin connector)		
<b>USB</b>	4x or 8x USB 2.0		
<b>Temperature</b>	-40°C to 85°C		
<b>Power</b>	12V and 5V via HDD connector, or optional screw terminal connector		
<b>Power Consumption</b>	<b>Voltage</b>	<b>Current - Ultra Lite</b>	<b>Current – Lite</b>
	+5V	Up to 5A	Up to 6.8A
	+12V	200mA	200mA
<b>Warranty and Support</b>	Lifetime warranty and free technical support		

## Part Numbers

The following are the base model part numbers for the Ultra Lite and Lite Qseven Carrier Boards:

<b>Part Number</b>	<b>Description</b>	<b>Size</b>
QCG005	Ultra Lite Qseven Carrier Board	PicoITX 100x72mm
QCG006	Lite Qseven Carrier Board	100x128mm